

From: [Miller, Garyg](#)
To: [Sanchez, Carlos](#)
Subject: FW: Inquiry from Texas Monthly
Date: Tuesday, February 17, 2015 1:53:00 PM

Gary Miller
EPA Remedial Project Manager
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From: Miller, Garyg
Sent: Tuesday, February 17, 2015 1:31 PM
To: Turner, Philip; Sanchez, Carlos; Tzhone, Stephen
Subject: FW: Inquiry from Texas Monthly

Carlos/Phil/Stephen – anything to add/edit on answers below?

Thanks,

Gary Miller
EPA Remedial Project Manager
214-665-8318
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Responses to Kelsey's questions:

1. Has any testing been conducted around the pits or southern impoundments since the cap was put in place?

Yes. The water within the cap over the northern pits was tested in May through July of 2012 (the cap was completed in 2011). In addition, sampling of residential soil was done in August 2011 on both the east and west sides of the river adjacent to the waste pits. Sediment sampling was done for the upstream background areas of the San Jacinto River in November of 2011, and in the Old River adjacent to the southern impoundment in 2012. A second phase of soil sampling was also performed in the southern impoundment in 2012. A discussion of these sampling events is included in the Remedial Investigation Report (http://www.epa.gov/region6/6sf/texas/san_jacinto/san-jacinto-remedial-investigation-report-vol-1.pdf)..

And finally, there were groundwater monitoring wells installed in and next to the southern impoundment in 2013; these wells were sampled in May and June 2013. Details are discussed in Addendum 1 to the Remedial Investigation Report



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http://www.epa.gov/region6/6sf/texas/san_jacinto/southern-impoundment-ground-water-investigation-results.pdf).

2. After Harris County Attorneys pointed out the detection limit was set 100 times too high when checking for dioxin, did anyone with the EPA check the detection limits for the other pollutants?

Yes, the detection limits for all chemicals of concern were checked against the groundwater standards adopted for the Site. The groundwater detection limits for the Site were based on the TCEQ protective concentration levels (PCLs) for groundwater resources and the National Drinking Water Standards.

A concern is whether waste material is migrating into the river through the cap. It was found that the cap has stopped the migration of dioxin into the river. To check this, samples were collected at 14 locations within the submerged parts of the cap. The study used solid-phase micro-extraction (SPME) porewater samplers as developed by Dr. Danny Reible at the University of Texas; Dr. Reible also assisted with the collection and analysis of the samples. The results were that the dissolved concentrations of 2,3,7,8-TCDD (dioxin) and 2,3,7,8-TCDF (furan) in the water within the cap are less than 0.01 pg/L. A more detailed discussion of sample collection and analysis is given in the Remedial Investigation Report.

3. Did anyone from the EPA check to make sure the PRPs contracted scientists were using the correct standards when checking the ground water?

Yes. The groundwater detection limits for the San Jacinto River Waste Pits Site were based on the TCEQ PCLs for groundwater resources and the National Drinking Water Standards. The work plans for the sampling were approved by EPA after review by EPA, TCEQ, and Harris County.

4. When Gary said surface water quality standards were used when testing the ground water, do he mean in terms of contaminants that were tested for or the detection limits that were set?

The surface water quality standards were not used to establish detection limits for the groundwater. Instead, the groundwater detection limits for the Site were based on the TCEQ PCLs for groundwater resources and the National Drinking Water Standards. The contaminants that were tested were determined based on a multi-step evaluation, which started with the Priority Pollutant List that was evaluated based on whether the chemical was expected to be present in pulp mill waste; and the resulting list was screened using a risk-based process described in the Remedial Investigation Feasibility Study Workplan (November 2010).

A dioxin total maximum daily load (TMDL) project has been underway to determine the prescriptive measures necessary to restore water quality in water bodies affected by the consumption advisories in the Houston Ship Channel and Upper Galveston Bay. This dioxin TMDL project will eventually determine the amount (or load) of dioxin that a body of water can receive and still support its designated use of recreation, fishing, navigation, industrial

water supply, and/or aquatic life. This allowable dioxin load is then allocated among all the potential sources of pollution within the watershed and then, if necessary, measures to reduce this load will be developed. For questions regarding the TMDL project , please see the following link: <http://www.epa.gov/region6/water/npdes/tmdl/contacts.htm>

From: Durant, Jennah
Sent: Friday, February 13, 2015 1:45 PM
To: Miller, Garyg; Meyer, John
Subject: FW: Inquiry from Texas Monthly

Hi Gary and John—

Here is the email from Kelsey at Tx Monthly with her remaining questions. Let me know when you can have responses ready.

Jennah
x2287

1. Has any testing been conducted around the pits or southern impoundments since the cap was put in place?
2. After Harris County Attorneys pointed out the detection limit was set 100 times too high when checking for dioxin, did anyone with the EPA check the detection limits for the other pollutants?
3. Did anyone from the EPA check to make sure the PRPs contracted scientists were using the correct standards when checking the ground water?
4. When Gary said surface water quality standards were used when testing the ground water, do he mean in terms of contaminants that were tested for or the detection limits that were set?